

Office of Enforcement

CHAIN OF CUSTODY RECORD

REGION 5
77 West Jackson Boulevard
Chicago, Illinois 60604

[illegible]

5-140062

Project No. 02AH56 Project Name CHESHIRE MONITORING STUDY 90101A
AIR 0207003 ARRIVAL DATE: 7/10/2002 DUE DATE: 8/9/2002

Sampler

Mike Murphy

Cooler ID 02AH561 Page 5-140062

Sample Id:	Station	Date / Time	Grab / Comp	Station Location	No Bottles	Tag Numbers
02AH56D01	D01	01/07/2002 00:00:00	<input type="radio"/> Grab <input checked="" type="radio"/> Com	GHS	1	5-340248 1 to 1

Bottle No. 1

Parameter

PM10

Sample Id:	Station	Date / Time	Grab / Comp	Station Location	No Bottles	Tag Numbers
02AH56S01	S01	01/07/2002 00:00:00	<input type="radio"/> Grab <input checked="" type="radio"/> Com	GHS	1	5-340247 1 to 1

Bottle No. 1

Parameter

PM10

Sample Id:	Station	Date / Time	Grab / Comp	Station Location	No Bottles	Tag Numbers
02AH56S02	S02	01/07/2002 00:00:00	<input type="radio"/> Grab <input checked="" type="radio"/> Com	RVHS	1	5-340249 1 to 1

VOID,
M.S.N.

Bottle No. 1

Parameter

PM10

Sample Id:	Station	Date / Time	Grab / Comp	Station Location	No Bottles	Tag Numbers
02AH56S03	S03	01/07/2002 00:00:00	<input type="radio"/> Grab <input checked="" type="radio"/> Com	ADDAVILLE	1	5-340250 1 to 1

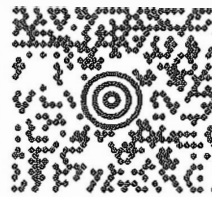
Bottle No. 1

Parameter

PM10

FROM:
SOUTHEAST DISTRICT OFFICE
(740) 385-8501
OHIO EPA
2195 E. FRONT STREET
LOGAN OH 43138-8637

2 LBS 1 OF 1



IL 606 9-08



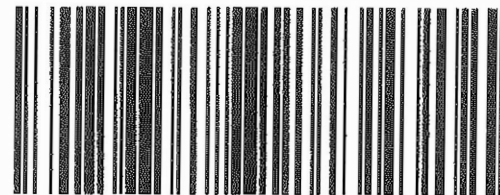
SHIP TO:

WILLIAM SARGENT JR.
USEPA CENTRAL REGIONAL LABORATORY
10 FLOOR
536 SOUTH CLARK STREET
CHICAGO IL 60605

UPS NEXT DAY AIR

TRACKING #: 1Z 401 199 01 4061 1967

1



BILLING: P/P

UOW 41.16 Konica F 18.0A 04/2002

Fold here and place in label pouch

CENTRAL REGIONAL LABORATORY
Data Checklist

Data Set AIR 0207003 CHESHIRE MONITORING

☒ Chain of Custody

☒ Transmittal Report w/signatures of the following:

- Analyst(s)
- Environmental Data Coordinator

Invoice # 3040918

Prepared by: Sylvia Griffin 8/8/02
Environmental Data Coordinator

Revised 8/6/02



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5 CENTRAL REGIONAL LABORATORY

536 SOUTH CLARK STREET

CHICAGO, ILLINOIS 60605

Date: AUG 08 2002

Subject: Review of Region 5 Data for CHESHIRE MONITORING STUDY

From: Francis A. Awanya, Chemist *FAA*
Region 5 Central Regional Laboratory

To:

Attached are the results for: CHESHIRE MONITORING STUDY

CRL work order number: 0207003

Samples analyzed for: **Suspended Particles**

Results are reported for sample designations: 2002AH56S01, 2002AH56D01, and 2002AH56S03.

AUG 0/8 2002

Data Management Coordinator and Date Received

Date Transmitted: AUG 0 8 2002

Please have the U.S. EPA Project Manager/Officer complete the Customer Satisfaction Survey, attached, or call the CRL Sample Coordinator at 3-1226.

Please sign and date this form below and return it with any comments to:

Sylvia Griffin
Data Management Coordinator
Region 5 Central Regional Laboratory
ML-10C

_____/_____/_____
Received by and Date

Comments:

CRL Data Review Qualification Codes

QUALIFIER	DESCRIPTION
B	This flag is used when the analyte is found in the associated <u>B</u> lank as well as the sample. It indicates possible blank contamination and warns the user to take appropriate action while assessing the data. See the case narrative for a discussion of common lab contaminants and/or the relative concentration of contamination in the samples and blanks for relevance.
J	This flag is used when the analyte is <u>estimated</u> due to quality control limit(s) being exceeded. This flag accompanies all GC/MS tentatively identified compounds (TICs). This flag also applies to a suspected, unidentified interference. This flag is placed on affected detected results as well as non-detected (i.e., "U" flagged) results. (<u>J</u> is the flag used in the Superfund CLP SOW and Data Review Functional Guidelines and is used by CRL for consistency.)
M	This flag is used when the analyte is confirmed to be qualitatively present in the sample, extract or digestate, with a quantity at or above the CRL <u>M</u> ethod Detection Limit (MDL) but below the lowest concentration of the calibration curve. This flag indicates the quantitated value is <u>estimated</u> since it falls below the lowest calibration standard in the calibration curve.
N	This flag applies to GC/MS <u>T</u> entatively Identified Compounds (TICs) that have a mass spectral library match.
Q	This flag applies to analyte data that are severely estimated due to quality control and/or <u>Q</u> uantitation problems, but are confirmed to be qualitatively present in the sample. <u>No value is reported with this qualification flag.</u>
R	This flag applies to analyte data that are <u>R</u> ejected and unusable due to severe quality control, quantitation and/or qualitative identification problems. No other qualification flags are reported for this analyte. <u>No value is reported with this qualification flag.</u>
U	This flag is used when the analyte was analyzed for but <u>U</u> ndetected in the sample. The CRL RL for the analyte accompanies this flag. When the customer requests CRL to report below our RL down to our MDL, undetected analytes are reported with a "U" code and the MDL. As with sample results that are positive, the value is corrected for dry weight, dilution and/or sample weight or volume.

03/07/01



Environmental Protection Agency Region 5
Central Regional Laboratory

536 South Clark Street, Chicago, IL 60605
Phone:(312)353-8370 Fax:(312)886-2591

WORK ORDER

Printed: 7/30/02 2:55:50PM

0207003

US EPA Region 5 Central Regional Laboratory

Client: Air Division, US EPA Region 5
Project: Gavin, Cheshire. Ohio

Project Manager: Marilyn Jupp
Project Number: [none]

Report To:

Kathy Triantafillou
Air Division, US EPA Region 5

77 West Jackson Boulevard
Chicago, IL 60605

Phone: (312) 353-4775
Fax: (312) 353-2001

Date Due: Aug-10-02 15:00 (30 day TAT)

Received By: William Sargent

Date Received: Jul-10-02 16:49

Logged In By: William Sargent

Date Logged In: Jul-10-02 16:49

Samples Received at: °C Starts 8-3-01
All containers intact: No Ends 8-3-02
Sample labels/COC agree: No
Samples Preserved Properly: No
Custody Seals Present: No

Analysis	Due	TAT	Expires	Comments
0207003-01 2002AH56D01-GHS [Air Filter] Sampled Jul-01-02 00:00 Central				GHS#3012, PSTG AVG=15.6
PM10	Aug-08-02 12:00	28	Jul-31-02 00:00	
0207003-02 2002AH56S01-GHS [Air Filter] Sampled Jul-01-02 00:00 Central				GHS#3013, PSTG AVG=15.75
PM10	Aug-08-02 12:00	28	Jul-31-02 00:00	
0207003-03 2002AH56S03-ADDAVILLE [Air Filter] Sampled Jul-01-02 00:00 Central				ADDAVILLE, PSTG AVG=15.8
PM10	Aug-08-02 12:00	28	Jul-31-02 00:00	

ENVIRONMENTAL PROTECTION AGENCY
REGION V
CENTRAL REGIONAL LABORATORY
FINAL RESULT REPORT FOR THE TEAM: ANALYTICAL AND INORGANIC (A&I)

DIVISION/BRANCH: AIR DIVISION SAMPLING DATE: 07/01/2002 LAB ARRIVAL DATE: 07/10/2002 DUE DATE: 08/08/2002
DU NUMBER: 90101A WORK ORDER NUMBER: 0207003 STUDY: CHESHIRE MONITORING STUDY PRIORITY: 1 LABORATORY: CRL

SAMPLE #	CRL LOG NUMBER	SAMPLE DESCRIPTION	SUSPENDED PARTICLE (g/filter)			
1	2002AH56D01	GUIDING HANDS	0.0820			
2	2002AH56S01	GUIDING HANDS	0.0814			
4	2002AH56S03	ADDAVILLE	0.0853			
DATE OF ANALYSIS			07/26/2002			
ANALYST			<i>FAS</i>			

Reviewed by: *AD* Date: *08/08/02*

Page 1 of 1

CRL SOP: HK015	Date: 07 January 2000	Revision No: 1
Data review for the Analytical and Inorganic Group		Page __ of __

ATTACHMENT II

CRL Analytical and Inorganics Data Review Checklist

Batch Number: 0207001, 7002, 7003, 7004 Facility: CHESHIRE MONITORING STUDY

Parameter: SUSPENDED SOLIDS CRL.SOP: AIG047

Package Overview:	YES	NO
Raw Data Package Complete?	✓	
Results Reported Correctly?	✓	
Special Requests Done?	N/A	
Calculations Checked?	✓	
Calibration Not Exceeded?	N/A	
Manual Peak Integration performed? Circle one IC or GC and Check	N/A	
Field QC Checked?	N/A	
Quality Control:		
Holding Times Met?	N/A	
Preservation Checked?	N/A	
Proper Digestion Verified?	N/A	
Initial Instrument Performance Checks Verified?	✓	
Calibration Verification Checked?	N/A	
Sample-Specific QC (Internal Standards or Analytical Spikes) Okay?	N/A	
Matrix QC Checked?	N/A	
Digestion Blanks Checked?	N/A	
Spiked Blank Checked?	N/A	
LCS (if applicable) Checked?	N/A	
QCS (if applicable) Checked?	N/A	
Final Check		
Technical Review Done?	✓	
Narrative Complete?	✓	

Analyst: FAA Peer Reviewer: AD

Date: 7/31/2002 Date: 08/01/02

Comments Attached? (Y/N) _____

Data Set Number:	<u>0207003</u>	Parameter:	<u>Suspended Particles</u>
Facility Name:	<u>CHESHIRE MONITORING STUDY</u>		
Study Name:	<u>CHESHIRE MONITORING STUDY</u>		
Date of Narrative:	<u>07/30/2002</u>	Analyst:	<u>FAA</u>
Prepared by:	<u>FAA</u>	Signature:	<u>FAA</u>

ANALYSIS CASE NARRATIVE

Four (4) exposed filters were received for suspended particle analysis at the Central Regional Laboratory (CRL) on July 10, 2002. Those filters were fractions of clean filters, prepared at the CRL and sent to the field for exposure. Filter identification numbers and other pertinent information obtained from the individual filters and packaging envelopes are presented in the table below.

Filters ID	Samples ID	Tag Number
Q8609535	2002AH56D01	5-340248-1
Q8609536	2002AH56S01	5-340247-1
Q8609538	2002AH56S03	5-340250-1

Filter equilibrations and final weighting of exposed filters were performed according to CRL.SOP AIG047. Analysis of exposed filters began on 07/23/2002 and was completed on 07/26/2002. All exposed filters were in good conditions. No sampler serial number was provided by the field for filter G8609538 (CRL Sample I.D 2002AH56S03).

Holding time was incorrectly calculated in CRL LIMS and reported on work order form 0207003 to be July 31, 2002. PM10 analysis has no set holding time in the SOP used.

QUALITY CONTROL (QC):

Analysis results were evaluated using the QC requirements of CRL.SOP AIG047. All the required quality control criteria for the laboratory, method, and system performance audits were evaluated and determined to be within the limits.

SAMPLE RESULTS:

All the sample results are acceptable for use.

ELECTRONIC DATA:

No electronic data.

CHESHIRE AIR MONITORING PROJECT

PM10

Parameter: Suspended Particles

Work Order Numbers: 0207001, 0207002, 0207003, 0207004

Date of Analysis 07/26/2002

Analyst: FAA

BALANCE VERIFICATION:

Standard Weights	Balanced weight	Differences
Actual (g)	Balanced (g)	(g)
Limit +/-0.0005 g		
1.0000	1.0001	-0.0001
2.0000	2.0000	0.0000
5.0000	5.0000	0.0000

QC-SUMMARY FOR EXPOSED FILTERS

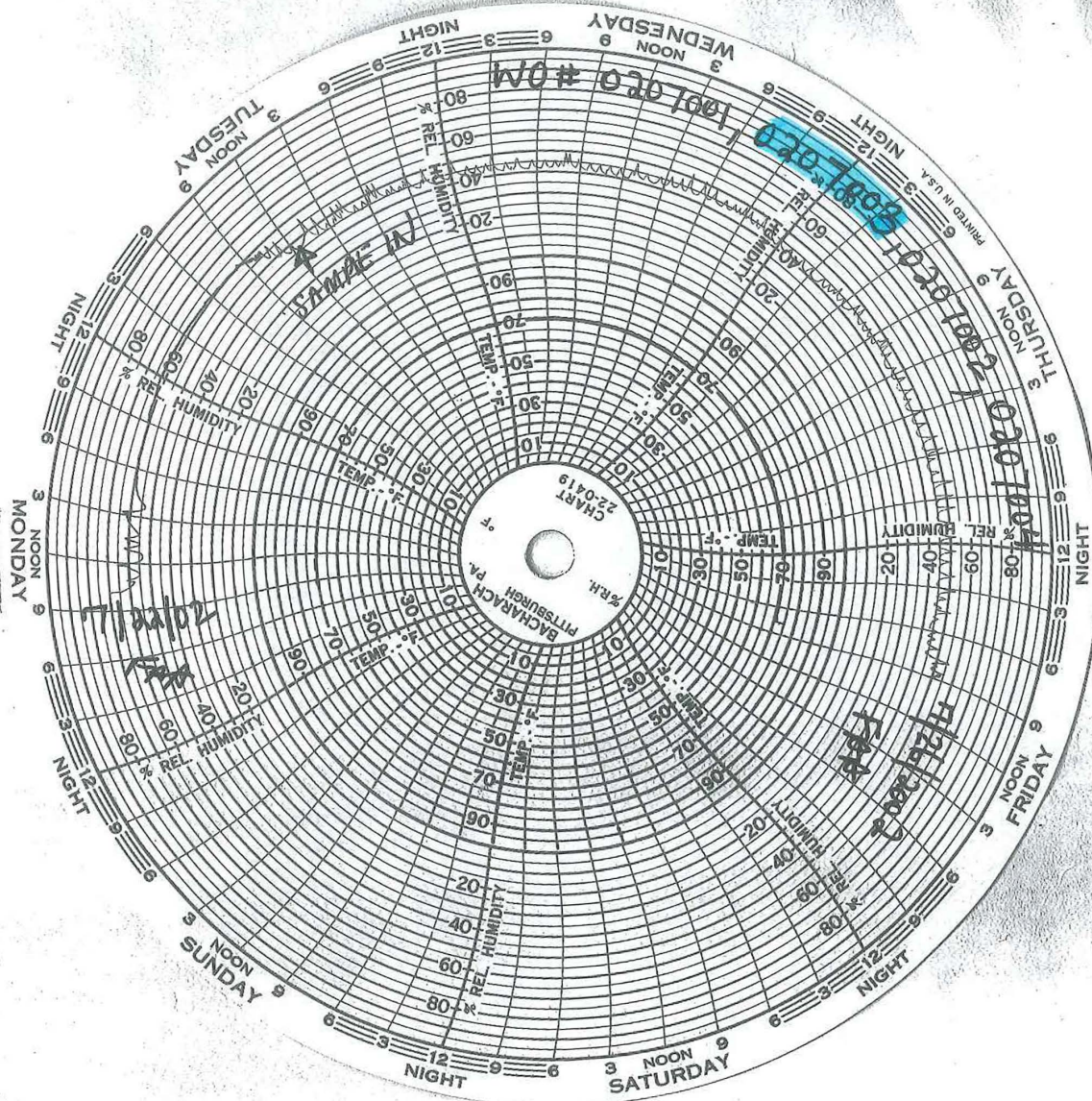
Filter ID	CRL Sample	Sampling	ANALYST	Exposed
Number	I.D Number	Date		weight (g)
Q8609541	2002AH57S03	07/07/02	Analyst 1	4.4431
Q8609541	2002AH57S03	07/07/02	Analyst 2	4.4430
Differences (Limit +/- 5 mg).....				0.0001
Q8609548	2002AH54D01	06/19/02	Analyst 1	4.4291
Q8609548	2002AH54D01	06/19/02	Analyst 2	4.4292
Differences (Limit +/- 5 mg).....				-0.0001
Q8609552	2002AH54S02	06/19/02	Analyst 1	4.4318
Q8609552	2002AH54S02	06/19/02	Analyst 2	4.4318
Differences (Limit +/- 5 mg).....				0.0000

CHESHIRE AIR MONITORING PROJECT
PM10

Filter ID Number	CRL Sample I.D Number	Sampling Date	Station Location	Sampler SN	Pstg Avg	P1/Pa	Total Volume (M^3)	Pre Weight of filters (g)	Exposed weight (g)	Weight Gain	PM10 (UG/M^3)
Work Order Number 0207001											
Q8609548	2002AH54D01	06/19/02	Guiding Hands School	3013	15.55		0.00	4.3659	4.4291	0.0632	ERR
Q8609547	2002AH54S01	06/19/02	Guiding Hands School	3012	15.85		0.00	4.3662	4.4304	0.0642	ERR
G8609552	2002AH54S02	06/19/02	RVHS	-	16.10		0.00	4.3665	4.4318	0.0653	ERR
Q8609549	2002AH54S03	06/19/02	Addaville	-	15.75		0.00	4.3849	4.4356	0.0507	ERR
Work Order Number 0207002											
Q8609531	2002AH55D01	06/25/02	Guiding Hands School	3013	15.90		0.00	4.3346	4.3745	0.0399	ERR
Q8609532	2002AH55S01	06/25/02	Guiding Hands School	3012	15.80		0.00	4.3574	4.3996	0.0422	ERR
G8609533	2002AH55S02	06/25/02	RVHS	-	16.30		0.00	4.3820	4.4179	0.0359	ERR
Q8609534	2002AH55S03	06/25/02	Addaville	-	16.00		0.00	4.3544	4.4460	0.0916	ERR
Work Order Number 0207003											
Q8609535	2002AH56D01	07/01/02	Guiding Hands School	3013	15.95		0.00	4.3563	4.4383	0.0820	ERR
Q8609536	2002AH56S01	07/01/02	Guiding Hands School	3012	15.60		0.00	4.3340	4.4154	0.0814	ERR
Q8609538	2002AH56S03	07/01/02	Addaville	-	15.80		0.00	4.3530	4.4383	0.0853	ERR
Work Order Number 0207004											
Q8609539	2002AH57D01	07/07/02	Guiding Hands School	3013	15.70		0.00	4.3775	4.4191	0.0416	ERR
Q8609540	2002AH57S01	07/07/02	Guiding Hands School	3012	15.80		0.00	4.3896	4.4373	0.0477	ERR
G8609537	2002AH57S02	07/07/02	RVHS	-	16.20		0.00	4.3840	4.4367	0.0527	ERR
Q8609541	2002AH57S03	07/07/02	Addaville	-	15.95		0.00	4.3922	4.4431	0.0509	ERR

W0#0207003

FILTER I.O.	TARE wt (g)	DUP wt (g)	EXPOSED wt (g)	EXPOSED wt/DUP (g)	Comments
Q8609531	4.3346		4.3745		
Q8609532	4.3574		4.3996		Tear-But all pieces present
Q8609533	4.3820		4.4179		
Q8609534	4.3544		4.4460		
Q8609535	4.3563		4.4383		
Q8609536	4.3340		4.4154		
Q8609537	4.3840		4.4367		
Q8609538	4.3530		4.4383		
Q8609539	4.3775		4.4191		
Q8609540	4.3896	4.3893	4.4373		
Q8609541	4.3922		4.4431	4.4430 12	
Q8609542	4.3772				
Q8609543	4.3893				
Q8609544	4.3942				
Q8609545	4.3801				
Q8609546	4.3690				
Q8609547	4.3662	4.4304	4.4304		
Q8609548	4.3659	4.4291	4.4291	4.4292 12	
Q8609549	4.3849		4.4356		
Q8609550	4.3860	4.3863			
Q8609551	4.3948	4.4399			
Q8609552	4.3665	4.4318	4.4318	4.4318 12	
Q8609553	4.4153	4.4616			
Q8609554	4.3975	4.4435			



W0# 0207003

GENERAL
INFORMATION

STANDARD
WEIGHTS

BALANCED
WEIGHTS

SARTORIUS SN

1.0000

1.0001

S/N 37010119

2.0000

2.0000

FAA

5.0000

5.0000

7/26/02

7/26/0122

1120131846

~~10000~~ 100

99.9999

50

49.9998

20

20.0002

10

10.0003

2

2.0001

COMMENTS:

STD

ACTUAL

PM-10

 $\mu\text{g}/\text{m}^3$

FLOW

 m^3/min

TOTAL FLOW

 m^3

SAMPLE WT

ELAPSED TIME

1440

MINUTES

PRESS

mmHg

INITIAL WT

AVG. RECORDER RESP.

15.75

TEMP

 $^{\circ}\text{C}$

K

FINAL WT

TSP

SITE

GHS#3013, Q4609535

PM-10

AIRS

OPERATOR

DEPA

DATE

7-1-02

US EPA Region 5 Field Sample



5-340248-1

Parameters PM10

AIR 0207003

Preservative None

S M M D B D

Sample ID 02AH56D01

X

Sampler Mike Murphy

Date 7-1-02

COMMENTS:

STD _____ ACTUAL _____
 FLOW m^3/min _____
 ELAPSED TIME 1440 MINUTES
 PRESS mmHg _____
 TEMP 15.6 °C _____
 K _____
 FINAL WT _____
 INITIAL WT _____
 SAMPLE WT _____
 TSP _____
 SITE GH# 3012, Q8609534
 AIRS PM-10
 OPERATOR QFPA DATE 7-1-02

US EPA Region 5 Field Sample



5-340247-1

Parameters PM10

AIR 0207003

Preservative None S M M D B D

Sample ID 02AH56S01 X

Sampler Mike Murphy

Date 7-1-02

EPA 2306 (REVISED 10/91)

COMMENTS



ACTUAL

01-113

19/10/2019

FLORIAN

 m^3/m^2

TOTAL FLOW

m³ SAMPLE WT

SAMPLE WT

ELAPSED TIME

1570

MINUTES

ଉତ୍କଳ

RENT

INITIAL

AVG. RECORDER RESP.

15.8

TEMP

A black and white micrograph showing a single cell. The cell has a large, dark, circular nucleus containing a smaller, even darker nucleolus. The cytoplasm is filled with a granular texture, and the cell is surrounded by other cells, though they are less distinct.

FINAL WT

507

09
—
7
m

Ashtville

October

12
 11
 10
 9
 8
 7
 6
 5
 4
 3
 2
 1

ALPS

OPERATOR

07/12/14

DATE _____

100

US EPA Region 5 Field Sample

5-340250-1

Parameters PM10

AIR 0207 003

Preservative None
Sample ID 02AH56S03

Sampler M. L. W.

Date 17 11 1967

7-1-02